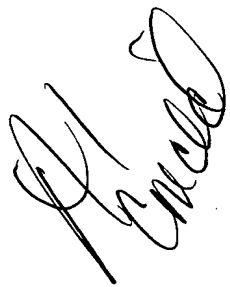



Divisional of
Serial No. 09/341,340 - - - 2



08/948,987 filed October 10, 1997, now U.S. Patent No. 5,916,670, issued June 29, 1999, which itself is a continuation-in-part application of United States Patent Application Serial No. 08/784,536 filed January 17, 1997 now U.S. Patent No. 5,866,242, issued February 2, 1999. The disclosures of all three applications are incorporated herein by reference.--

In the application as originally filed, please replace the paragraph beginning at page 5, line 2, with the following re-written paragraph:



--In one aspect, the present invention provides an absorbent material having a basis weight of from about 200 g/m² to about 400 g/m², a density of from about 0.35 g/cc to about 0.40 g/cc and a ratio of Gurley Stiffness (mg) to density (g/cc) of less than about 3700. The material is airlaid as a bottom layer of pulp, a middle layer of pulp and superabsorbent material disposed in amongst the pulp, and a top layer of pulp. The pulp preferably has a Kappa value of less than about 100. In one embodiment, the absorbent material includes from about 40 weight percent to about 90 weight percent cellulosic fibers and from about 10 weight percent to about 60 weight percent superabsorbent material. Such absorbent material has a water content of less than about 10 weight percent, a density of greater than about 0.25 g/cc, a ratio of Gurley Stiffness (mg) to density (g/cc) of less than about 3700 and a pad integrity of greater than about 12 Newtons.--

In the application as originally filed, please replace the paragraph beginning at page 24, line 5, with the following re-written paragraph:

3
--Additional studies were performed using a 400 g/m² basis weight, 0.40 g/cc density, 40 weight percent superabsorbent material of the present invention (C11, C12 and C13) and the absorbent cores from commercially available Huggies® and Pampers® diapers; and commercial roll goods from Buckeye Absorbent Products (Delta, British Columbia, Canada)(Zorb Core Thermal Bond Product Code 44500) and Concert Fabrication LTEE (Thurso, Quebec, Canada)(Concert Product Code 280). The results of those studies are summarized below in Table 3.--

In the application as originally filed, please replace the paragraph beginning at page 27, line 24 and extending to the end of Table 7 at line 32 of page 28, with the following re-written paragraph:

--45 Degree wicking absorption was determined using the procedures of Example 2-- The following groups of samples were tested: (a) absorptive material of the present invention with a basis weight of about 400 g/m², a density of about 0.4 g/cc, and varying superabsorbent material contents of about 15 weight percent (Sample C11), 28 weight percent (C12), 39 weight percent (C1) or 42 weight percent (C13); (b) thermal bonded air-laid fluff obtained from Concert Fabrication LTEE (Concert Fabrication LTEE Product Codes 500, 280, 130) or Buckeye Absorbent Products (Zorb Core Thermal Bond Product Code 44500); the absorbent core removed from a Huggies® Diaper; and the absorbent core removed from a Pampers® diaper.

Divisional of
Serial No. 09/341,340 - - - 4

Samples C11, C12 and C13 were made using 100 percent cold caustic treated fibers.

Sample C1 was made using a blend of 50 percent cold caustic treated fibers and 50

percent non-cold caustic treated fibers. For each sample, the amount of fluid

absorbed per gram of sample was plotted against distance from the origin (source of

fluid). A representative plot is shown in FIG. 5. The area under the curve was

calculated using the following formula:

$$[(y_1)(x_2 - x_1) + 0.5 (y_2 - y_1)(x_2 - x_1) + (y_2)(x_3 - x_2) + 0.5 (y_3 - y_2)(x_3 - x_2) + \dots + (y_n)(x_n - x_{n-1}) + 0.5 (y_n - y_{n-1})(x_n - x_{n-1})]$$
, where X_i is distance at the i^{th} inch and Y_i is absorbency at the i^{th} inch.

This area was then multiplied by the gravitational constant (981 cm/s^2) and the sine of 45° to result in the work value of ergs/g. The derived energy value was normalized for superabsorbent material by dividing by percent superabsorbent material (%SAP) content. The results of these studies are summarized below in Table 7.

Table 7				
Sample	% SAP	Total Wicking Energy (ergs/g)	Normalized Wicking Energy (ergs/g)	Density (g/cc)
C 1	39	161,299	4,136	0.38
C 11	15	143,295	9,553	0.36
C 12	28	152,509	5,447	0.36
C 13	42	162,200	3,862	0.38
Concert 500	45	93,016	2,067	0.12
Concert 280	30	67,216	2,241	0.17
Concert 130	18	56,219	3,123	0.13
Buckeye 44500	40	62,094	1,552	0.17
Huggies®	36	133,889	3,719	0.15
Pampers®	42	112,870	2,625	0.12